STATE WATER RESOURCES CONTROL BOARD BOARD MEETING SESSION – DIVISION OF WATER QUALITY DECEMBER 1, 2020

ITEM 5

SUBJECT

CONSIDERATION OF A RESOLUTION ESTABLISHING THE WATER QUALITY CONTROL PLAN FOR INLAND SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF CALIFORNIA; AND TOXICITY PROVISIONS

DISCUSSION

The State Water Resources Control Board (State Water Board) will consider establishing the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan), which includes the Toxicity Provisions (hereafter referred to as the Toxicity Provisions).

Currently, Section 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, which is also known as the Statewide Implementation Plan (SIP), includes minimum chronic toxicity control requirements for implementing the narrative toxicity objectives found in the Regional Water Quality Control Plans (basin plans) adopted by the nine Regional Water Quality Control Boards (Regional Water Boards). Each basin plan contains narrative toxicity objectives that require all waters to be maintained free of toxic substances in concentrations that produce detrimental responses in aquatic organisms. The narrative objectives are interpreted and implemented by the Regional Water Boards on a permit-by-permit basis. This approach has caused a lack of statewide consistency when addressing aquatic toxicity.

Beginning in 2003, the State Water Board acknowledged the need to revise the SIP to address inconsistencies in the application of effluent limitations for toxicity. In Order WQO 2003-0012, the State Water Board determined that the propriety of including numeric effluent limitations for chronic toxicity in National Pollutant Discharge Elimination System (NPDES) permits for publicly-owned treatment works (POTWs) should be considered in a regulatory setting, to allow for full public discussion and deliberation.

State Water Board Resolution No. 2003-0070 authorized State Water Board staff to make language corrections to the SIP and Resolution No. 2005-0019 directed State Water Board staff to introduce an amendment to the SIP to address narrative toxicity control provisions. Under State Water Board direction, the project was later changed from developing a statewide policy as an amendment to the SIP, to developing a statewide water quality control plan.

The Toxicity Provisions aim to provide consistent protection of aquatic life beneficial uses in waters throughout the state and protect aquatic habitats and biological life from the effects of known and unknown toxicant. In addition, the Toxicity Provisions will provide consistent protection of aquatic life through the establishment of statewide numeric water quality objectives for aquatic toxicity, a statewide statistical approach to analyze test results, and a consistent yet flexible program of implementation.

The numeric water quality objectives for chronic and acute aquatic toxicity are expressed as a null hypothesis and an alternative hypothesis and incorporate a regulatory management decision (RMD). The RMDs represent the allowable error rates and thresholds that would result in an unacceptable risk to aquatic life. For chronic toxicity, the RMD is set at 25 percent and for acute toxicity, the RMD is set at 20 percent. Attainment of both the acute and chronic water quality objectives would be demonstrated by rejecting the null hypotheses and accepting the alternative hypotheses using the Test of Significant Toxicity (TST) statistical approach.

The program of implementation contains the following elements: (1) aquatic toxicity testing methods and analysis, (2) implementation for non-storm water NPDES dischargers, (3) implementation for storm water dischargers regulated pursuant to NPDES permits, (4) implementation for nonpoint dischargers required to monitor toxicity, and (5) variances and exceptions to the toxicity water quality objectives.

The State Water Board is also proposing to establish the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan), which will be a single planning document that includes all the water quality control plan provisions adopted by the State Water Board that relate to surface waters other than open bays and the ocean.

A Draft Staff Report, including Substitute Environmental Documentation (hereafter Staff Report) was prepared to accompany the Toxicity Provisions. The Toxicity Provisions and Staff Report were released for a public comment period on October 19, 2018. A State Water Board hearing was held on November 28, 2018, to provide the public with an opportunity to provide oral comments. The comment period concluded on December 22, 2018. Two additional opportunities were provided for public comment. On December 24, 2019, two new appendices were added to the Staff Report. A public comment period on the content of the two appendices concluded on February 10, 2020. On July 7, 2019, the Second Revised Draft Toxicity Provisions and Second Revised Draft Staff Report were made publicly available. A public comment period on the changes between the October 19, 2018 and the July 7, 2020 versions of the Toxicity Provisions and the Staff Report concluded on August 24, 2020. Additional revisions were made to the Proposed Final Toxicity Provisions and Proposed Final Staff Report, which were made available to the public on October 30, 2020.

Written responses to comments, the Toxicity Provisions, and Staff Report, are available at the program webpage at:

www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_c ntrl.html

POLICY ISSUE

Should the State Water Board adopt the Toxicity Provisions and approve the Staff Report?

FISCAL IMPACT

State Water Board and Regional Water Boards staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL BOARD IMPACT

Upon adoption, the Toxicity Provisions are not expected to significantly impact Regional Water Board workload. Aquatic toxicity requirements are already incorporated into permits issued by the Regional Water Boards to implement narrative aquatic toxicity water quality objectives in their basin plans. The Toxicity Provisions provides specific direction and requirements for implementing the numeric aquatic toxicity water quality objectives in the Toxicity Provisions. If the Toxicity Provisions are not adopted, the Regional Water Boards would continue to implement permit requirements to ensure dischargers comply with narrative aquatic toxicity water quality objectives in their basin plans.

STAFF RECOMMENDATION

Staff recommends that the State Water Board adopt the Toxicity Provisions and approve the Staff Report.